REMARKS

I. Status of the Claims

Claims 32-35, 38-39, 42-50, and 59-61 are currently pending. Claims 36-37, 40-41, 51-58 have been canceled without prejudice herein. Claims 59-61 have been added herein. Those claims are supported in the specification as originally filed at, for example, Fig. 2. Accordingly, no new matter has been added.

II. Substance of the Interview

Applicants express their appreciation for the courtesies extended to Applicants' representatives during an interview with the Examiner on December 20, 2007. During that interview, the current rejections were discussed as detailed below. As indicated on the Interview Summary sheet, Applicants have canceled herein some of those claims rejected under 35 U.S.C. § 112, first paragraph. The remaining rejections are addressed herein.

III. Rejections Under 35 U.S.C. § 112, 1st Paragraph

Rejection of Claims 32-58

Claims 32-58 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Office Action at 2. The Examiner asserts that "[t]here is no written disclosure that discloses ... the 'pharmaceutically effective concentration' to therapeutically ... treat hypertriglyceridaemia." Office Action at 2. The Examiner also asserts that, although "[p]age 15 of the specification refers to a pharmaceutical composition that can be used to treat hyperglyceridaemia ... [it contains] no disclosure about treatment dosages." *Id.* Applicants respectfully traverse this rejection.

Compliance with the written description requirement only requires that the specification disclose information sufficient to show that the inventor possessed the invention at the time of the original disclosure. M.P.E.P. § 2163.02. Thus, the test for

compliance is whether there is a disclosure that "reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter." *Ralston Purina Co. v. Far-Mar-Co., Inc.*, 772 F.2d 1570, 1575, 227 USPQ 177, 179 (Fed. Cir. 1985) (citation omitted). Thus, "[t]he written description requirement does not require the applicant 'to describe exactly the subject matter claimed, [instead] the description must clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed.'" *Union Oil Co. of Cal. v. Atl. Richfield Co.*, 208 F.3d 989, 997 (Fed. Cir. 2000) (citation omitted)).

Here, the specification at page 15, lines 6-11 (emphasis added) expressly states that "[i]n [a] more preferred embodiment of the invention, the pharmaceutical and/or health supplement comprises at least one of EPA/DHA ethyl esters and is intended for a range of potential therapeutic applications including; treatment of hypertriglyceridaemia...." Accordingly, one of ordinary skill in the art would have recognized that the inventors were in possession of a pharmaceutical composition comprising a marine oil that comprised EPA ethyl ester and DHA ethyl ester in a pharmaceutically effective concentration to therapeutically treat hypertriglyceridaemia at the time of the original disclosure. Since treatment dosages are not claimed, they need not be disclosed to satisfy the written description requirement.

The Examiner is respectfully reminded that she has the initial burden of presenting, by a preponderance of evidence, why a person skilled in the art would not recognize in Applicants' disclosure a description of the inventions defined by the claims. M.P.E.P. 2163.04.

For at least the foregoing reasons, Applicants respectfully request withdrawal of this rejection.

Also in the present Office Action, the Examiner asserts that "the amounts given for various pollutants such as PCDD, PCDF, & TE_PCB is not disclosed in the specification." Office Action at 2. Applicants respectfully disagree.

Claim 34 recites that "the sum of PCDDs and PCDFs in the marine oil is less than 4.65 pg/g." Figure 2 shows that the sum of PCDDs and PCDFs before stripping was 4.65 pg/g, while after stripping, that sum was less than 4.65 pg/g, i.e., 0.46 pg/g. Similarly, claims 35, 38, 46, and 50 recite that "the sum of TE-PCB in the marine oil is less than 22.6 pg/g." Figure 2 shows that the sum of TE-PCB before stripping was 22.6 pg/g, while after stripping, that sum was less than 22.6 pg/g, i.e., 0.09 pg/g.

Thus, the amount claimed is expressly recited in the specification, and the figures show that the inventor possessed amounts less than these disclosed amounts. Accordingly, one of ordinary skill in the art would have considered the claims to have been disclosed by the specification. *See., e.g.,* M.P.E.P. § 2163.05 (*citing In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976), wherein support for a range of "between 35% and 60%" was found based on the disclosure of a range of "25%-60%" in the original specification in combination with a specific example of "36%.").

Accordingly, there is sufficient written description support in the present specification for the numerical ranges of the sum of PCDDs and PCDFs and the sum of TE-PCB. Therefore, Applicants respectfully request withdrawal of this rejection.

Rejection of Claims 36, 40, 51, and 57

Claims 36, 40, 51, and 57 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Office Action at 4. Without in any way conceding the propriety of the rejection, and solely in an effort to

expedite prosecution, Applicants have canceled these claims herein. Therefore, the rejection has been rendered moot.

Rejection of Claims 37, 41, 52, and 58

Claims 37, 41, 52, and 58 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Office Action at 4. Without in any way conceding the propriety of the rejection, and solely in an effort to expedite prosecution, Applicants have canceled these claims herein. Therefore, the rejection has been rendered moot.

Rejection of Claim 58

Claim 58 has been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Office Action at 5. Without in any way conceding the propriety of the rejection, and solely in an effort to expedite prosecution, Applicants have canceled claim 58 herein. Therefore, the rejection has been rendered moot.

IV. Rejections Under 35 U.S.C. § 102(b)

Rejections Over EPAX Product Specifications

Claims 32-35, 38, 39, and 42-46 have been rejected under 35 U.S.C. § 102(b) as being anticipated by the product specifications for EPAX 4020EE, 5500EE, 6000EE, or 6010EE. Office Action at 3. Applicants respectfully traverse this rejection.

As an initial matter, not all of the cited EPAX product specifications were prior art to the present application. Under 35 U.S.C. § 102(b), prior art includes patent or printed publications in this or a foreign country and things that were in public use or on sale in this country, more than one year prior to the U.S. filing date of the application. As noted in the

Supplemental Preliminary Amendment filed March 12, 2007, Applicants believe that the only EPAX products containing EPA ethyl ester and DHA ethyl ester that were sold in the United States before the July 11, 2002, priority date of the present application were EPAX 5500EE and EPAX 6000EE. Accordingly, at least EPAX 4020EE and 6010EE and their product specifications are not prior art to the present application.

Second, to anticipate a claim, a single reference must teach either explicitly or inherently each and every element of the claim. M.P.E.P. § 2131. Here, the Examiner has not shown that the product specification for either EPAX 5500EE or EPAX 6000EE teaches each and every element of the present claims. For example, the Examiner has not shown that either of those products comprises a marine oil which comprises eicosapentaenoic acid ethyl ester and docosahexaenoic acid ethyl ester in a pharmaceutically effective concentration to therapeutically treat hypertriglyceridaemia, as required by all of the pending claims.

According to their product specifications, EPAX 5500 EE contains at least 55% EPA EE and DHA EE and EPAX 6000 EE contains at least 60% EPA EE and DHA EE. Those concentrations are not pharmaceutically effective concentrations to therapeutically treat hypertriglyceridaemia, as required by each of the pending claims. That conclusion was confirmed in a study already of record and discussed in the March 12, 2007 Supplemental Preliminary Amendment at pages 11-13.

As already discussed, that clinical study was performed to compare the uptake and effect of three compositions on subjects with relatively low triglyceride levels on their lipid profiles[1]. Each of the three compositions tested comprised EPA ethyl ester and DHA ethyl

[1] The effect parameters in this study were the blood lipid fractions for TGs and cholesterol.

ester in the same ratio (approximately 1.0 : 0.8) but the concentration of those esters in the compositions differed, as shown below:

EPA EE + DHA EE	Total Omega-3 EE
62.5%	71%
80%	88.5%
85%	93.5%

Despite the different concentrations of fatty acid esters, by administering different volumes of each of the three compositions, subjects received the same amount (5.1 g) of EPA ethyl ester and DHA ethyl ester per day.

In the article, the authors state:

> Concentrated omega-3 fatty acid formulations are very effective in lowering TGs. Even in subjects with essentially normal triglyceride values at study entry (approximately 130 mg/dl), the 85% and the 80% EPA/DHA concentrations lowered TGs by about 15%. **In contrast, the 62.5% concentration had little effect on TGs.** Even though the subjects in the 62.5% treatment group had somewhat higher baseline triglyceride levels (approximately 150 mg/dl), **this concentration, with the same omega-3 fatty acid content as the 85% and 80% concentrations, did not produce a meaningful impact on the triglyceride level.**

Bryhn article (already of record) at page 22 (emphasis added).

Based on those results, it can be concluded that EPAX 5500 EE and 6000 EE do not comprise a marine oil which comprises EPA ethyl ester and DHA ethyl ester in a concentration that is pharmaceutically effective to therapeutically treat hypertriglyceridaemia. The pharmaceutical effectiveness of those results are supported by the specification for Omacor™ in the European Pharmacopoeia 5.3, a copy of which is submitted herewith for the Examiner's convenience. That reference indicates that EPA and DHA must be present in a minimum concentration of 80%. *See* European Pharmacopoeia at p. 2. That limit is well above those of the ***health supplements*** EPAX 5500 EE and 6000 EE. For at least these reasons, neither the EPAX products nor their specifications

anticipate the present claims. Therefore, for at least these reasons, the rejection should be withdrawn.

Rejection Over Dam

Claims 47-50 and 53-56 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Dam et al., "Efficacy of Concentrated n-3 Fatty Acids in Hypertriglyceridaemia: A Comparison with Gemfibrozil" *Clin. Drug Invest.* (2001) 21(3):175-181 ("Dam"). Office Action at 3. Applicants respectfully traverse this restriction.

In support of this rejection, the Examiner states that Dam "teaches n-3 fatty acids namely eicosapentaenioc [sic] acid ethyl ester and docosahexaenoic acid ethyl ester contained in Omacor™ ... in a pharmaceutically effective concentration to therapeutically []treat hypertriglyceridaemia." *Id.* However, Dam fails to teach each and every claim limitation of the present claims. For example, Dam and the Omacor™ product specification, for that matter, are wholly silent with respect to the pollutant levels in the Omacor™ used in Dam. Moreover, Omacor™ was not for sale in the U.S. prior to the instant application filing date. Therefore, for at least that reason, Dam does not expressly anticipate the present claims.

In addition, an anticipatory document must contain an enabling disclosure. *Chester v. Miller*, 906 F.2d at 1576 (Fed. Cir. 1990). A reference contains an enabling disclosure when one of skill in the art would have been able to practice the claimed invention with nothing more than her own knowledge and the reference. Because, as discussed above, the Dam reference, neither alone nor in conjunction with the Omacor™ product specification, provides a teaching regarding pollutant levels or methods for lowering those pollutants, the Dam reference is not enabled. For at least the reasons presented herein, the Dam reference does not anticipate the present claims. Accordingly, the rejection should be withdrawn.

V. Conclusion

In view of the remarks above, Applicants respectfully request reconsideration of the present application and the timely allowance of the pending claims.

Please grant any extension of time required to enter this response and Information Disclosure Statement and charge any additional required fees to our Deposit Account No. 06-916.

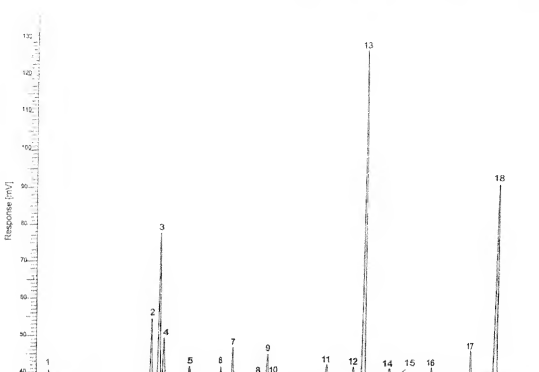
Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Dated: December 21, 2007

By: _____
Anthony C. Tridico
Reg. No. 45,958

Attachments: European Pharmacopoeia 5.3 (2 pages)



1. C16:0	5. C18:2 n-6	9. C20:1 n-9	12. C20:4 n-6	16. C21:5 n-3
2. C18:0	6. C18:3 n-3	9a. C20:1 n-11	13. EPA	17. C22:5 n-6
3. C18:1 n-9	7. C18:4 n-3	10. C20:1 n-7	14. C22:1 n-11	18. DHA
4. C18:1 n-7	8. C20:0	11. C20:4 n-3	15. C22:1 n-9	

Figure 2063.-2. – *Chromatogram for the assay of total omega-3-acid ethyl esters in omega-3-acid ethyl esters 60*

– *resolution* in the chromatogram obtained with the reference solution: minimum of 2.0 between the peaks due to monodocosahexaenoin and to didocosahexaenoin; minimum of 1.0 between the peaks due to didocosahexaenoin and tridocosahexaenoin.

Calculate the percentage content of oligomers plus partial glycerides using the following expression:

$$\frac{B}{A} \times 100$$

A = sum of areas of all the peaks in the chromatogram,

B = sum of the areas of the peaks with a retention time smaller than those of the ethyl ester peaks.

The ethyl ester peaks, which may be present in the form of an unresolved double peak, are identified as the major peaks in the chromatogram (Figure 2063.-1).

Limit:

– *oligomers + partial glycerides*: maximum 7.0 per cent.

ASSAY

EPA and DHA ethyl esters (*2.4.29*). See Figure 2063.-2.

Total omega-3-acids ethyl esters (*2.4.29*). See Figure 2063.-2.

STORAGE

Under an inert gas, in an airtight container, protected from light.

LABELLING

The label states:

– the content of total omega-3-acid ethyl esters,
– the content of EPA ethyl ester and DHA ethyl ester,
– the concentration of any added tocopherol.

01/2006:1250

OMEGA-3-ACID ETHYL ESTERS 90

Omega-3 acidorum esteri ethylici 90

DEFINITION

Ethyl esters of alpha-linolenic acid (C18:3 n-3), moroctic acid (C18:4 n-3), eicosatetraenoic acid (C20:4 n-3), timnodonic (eicosapentaenoic) acid (C20:5 n-3, EPA), heneicosapentaenoic acid (C21:5 n-3), clupanodonic acid (C22:5 n-3) and cervonic (docosahexaenoic) acid (C22:6 n-3; DHA). Omega-3-acid ethyl esters are obtained by transesterification of the body oil of fat fish species coming from families such as *Engraulidae*, *Carangidae*, *Clupeidae*.

Osmeridae, *Salmonidae* and *Scombridae* and subsequent physico-chemical purification processes including urea fractionation followed by molecular distillation.

Content:

– *EPA and DHA ethyl esters:* minimum 80 per cent, with minimum 40 per cent of EPA ethyl esters and minimum 34 per cent of DHA ethyl esters,

– *total omega-3-acid ethyl esters:* minimum 90 per cent.

Tocopherol may be added as an antioxidant.

CHARACTERS

Appearance: light yellow liquid.

Solubility: practically insoluble in water, very soluble in acetone, in ethanol (96 per cent), in heptane and in methanol.

IDENTIFICATION

Examine the chromatograms obtained in the assay for EPA and DHA ethyl esters.

Results: the peaks due to eicosapentaenoic acid ethyl ester and to docosahexaenoic acid ethyl ester in the chromatogram obtained with the test solution are similar in retention time and size to the corresponding peaks in the chromatogram obtained with the reference solution.

TESTS

Absorbance (*2.2.25*): maximum 0.55 at 233 nm.

Dilute 0.300 g to 50.0 ml with *trimethylpentane R*. Dilute 2.0 ml of this solution to 50.0 ml with *trimethylpentane R*.

Acid value (*2.5.1*): maximum 2.0, determined on 10 g in 50 ml of the prescribed mixture of solvents.

Anisidine value (*2.5.36*): maximum 20.0.

Peroxide value (*2.5.5, Method A*): maximum 10.0.

Oligomers. Size-exclusion chromatography (*2.2.30*).

Test solution. Dilute 10.0 mg of the substance to be examined to 10.0 ml with *tetrahydrofuran R*.

Reference solution. In a 100 ml volumetric flask, dissolve 50 mg of *monodocosahexaenoin R*, 30 mg of *didocosahexaenoin R* and 20 mg of *tridocosahexaenoin R* in *tetrahydrofuran R* and dilute to 100.0 ml with the same solvent.

Column 1:

– *size:* *l* = 0.3 m, Ø = 7.8 mm,

– *stationary phase: styrene-divinylbenzene copolymer R* (7 µm) with a pore size of 10 nm.

Columns 2 and 3 placed closest to the injector:

– *size:* *l* = 0.3 m, Ø = 7.8 mm,

– *stationary phase: styrene-divinylbenzene copolymer R* (7 µm) with a pore size of 50 nm.

Mobile phase: tetrahydrofuran R.

Flow rate: 0.8 ml/min.

Detection: differential refractometer.

Injection: 40 µl.

System suitability:

– *elution order* in the chromatogram obtained with the reference solution: tridocosahexaenoin, didocosahexaenoin, monodocosahexaenoin,

– *resolution:* minimum 2.0 between the peaks due to monodocosahexaenoin and didocosahexaenoin and minimum 1.0 between the peaks due to didocosahexaenoin and tridocosahexaenoin in the chromatogram obtained with the reference solution.

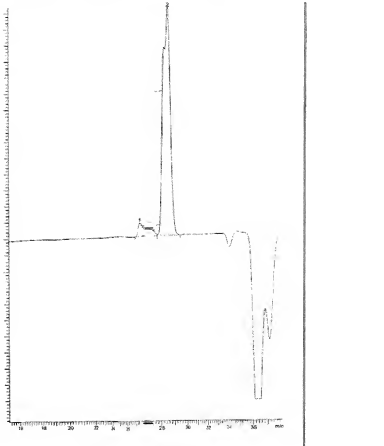
Calculate the percentage content of oligomers using the following expression:

$$\frac{B}{A} \times 1.00$$

A = sum of areas of all the peaks in the chromatogram.

B = sum of the areas of the peaks with a retention time smaller than the retention time of the peaks due to ethyl esters.

The ethyl ester peaks, which may be present in the form of an unresolved double peak, are identified as the major peaks in the chromatogram (Figure 1250.-1).



1. oligomers 2. ethyl esters

Figure 1250.-1. – *Chromatogram of the test for oligomers in omega-3-acid ethyl esters 90: spiked sample*

When the result obtained exceeds the limit due to the presence of monoglycerides, the following procedure is carried out.

Test solution. Weigh 10.0 mg of the substance to be examined into a quartz tube. Add 1.5 ml of a 20 g/l solution of *sodium hydroxide R* in *methanol R*, cover with *nitrogen R*, cap tightly with a polytetrafluoroethylene-lined cap, mix and heat on a water-bath for 7 min. Allow to cool. Add 2 ml of *boron trichloride-methanol solution R*, cover with *nitrogen R*, cap tightly, mix and heat on a water-bath for 30 min. Cool to 40-50 °C, add 1 ml of *trimethylpentane R*, cap and shake vigorously for at least 30 s. Immediately add 5 ml of a *saturated sodium chloride solution R*, cover with *nitrogen R*, cap and shake thoroughly for at least 15 s. Transfer the upper layer to a separate tube. Shake the methanol layer once more with 1 ml of *trimethylpentane R*.